BioLogic Chemical Works MATERIAL SAFETY DATA SHEET

MFG.CODE # 121A

SECT	TION I
MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.
BioLogic Chemical Works	248-941-0347
ADDRESS (Street, City, State and Zip Code)	
P. O. BOX 82501, Rochester MI 48308	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS
N/A	EZ Poxy (Part A)
CHEMICAL FAMILY	FORMULA
N/A	N/A

SECTION II – HAZARDOUS INGREDIENTS			
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES		%	TLV (UNITS)
Bisphenol A/Epichlorohydrin Based Epoxy Resin	>1	N/A	
Multifunctional Acrylate Monomer	(CAS# 13048-33-4)	>1	N/A

All components of this product are listed on the E.P.A./TSCA inventory of chemical substances.

SECTION III – PHYSICAL DATA				
BOILING POINT °F	200+	SPECIFIC GRAVITY (H2O = 1)	1.13	
VAPOR PRESSURE (mm. Hg. @ 20°C)	0.09	PERCENT VOLATILE BY VOLUME (%)	0	
VAPOR DENSITY (AIR = 1)	heavier	EVAPORATION RATE (=1) N-Butyl Acetate	slower	
SOLUBILITY IN WATER	negligible	PH	N/A	
APPEARANCE AND ODOR				
Clear to light amber viscous liquid with characteristic acrylate odor				

SECTION IV – FIRE AND EXPLOSION DATA			
FLASH POINT (Method Used)	FLAMMABLE LIMITS	Lel	Uel
		Not	Determined
200+°F	(Setaflash)		

EXTINGUISHING MEDIA

Water Fog, Dry Chemical, Foam, Carbon Dioxide

SPECIAL FIRE FIGHTING PROCEDURES

Fire fighters should wear full protective clothing including self-contained respiratory equipment operated in a positive mode. Use water spray to keep containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS

High temperatures and fire conditions may cause rapid and uncontrolled polymerization which can result in explosions and the violent rupture of containers.

SECTION V - HEALTH HAZARD DATA THRESHOLD LIMIT VALUE PRIMARY ROUTES OF ENTRY Inhalation Skin Contact X Other (Specify) No OSHA/ACGIH limits have been established **EFFECTS OF OVEREXPOSURE** Eyes- moderately irritating. Skin- moderate irritation, prolonged contact may cause blisters, may cause skin sensitization. Inhalation- may cause respiratory tract sensitization/irritation. EMERGENCY AND FIRST AID PROCEDURE Eyes- flush with copious amounts of water lifting lids and removing contact lenses to ensure complete irrigation- get medical attention. Skin- flush with water and then wash with soap and water, launder contaminated clothing before reuse- get medical attention if irritation persists. Inhalation- remove to fresh air and assist breathing as necessary- get medical attention. Ingestion- if appreciable quantities have been swallowed- get medical attention. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE Pre-existing skin and eye disorders may be aggravated. Persons with pre-existing skin or respiratory tract allergies may have an increased chance of allergic reactions to this product. CARCINOGEN: IARC NTP OTHER No **SECTION VI - REACTIVITY DATA CONDITIONS TO AVOID** STABILITY UNSTABLE STABLE Excessive heat **INCOMPATIBILITY (Materials to avoid)** Strong Acids, Bases, Amines, Mercaptans HAZARDOUS DECOMPOSITION PRODUCTS Oxides of Carbon, Aldehydes, and other organic substances MAY OCCUR **HAZARDOUS CONDITIONS TO AVOID** POLYMERIZATION WILL NOT OCCUR SECTION VII - SPILL OR LEAK PROCEDURES STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Eliminate all sources of ignition and ventilate area. Dike area to contain spill. Use absorbent material to soak up spill. Shovel or sweep into container for disposal. Wash spill area with detergent solution. WASTE DISPOSAL METHOD In accordance with all Local, State, and Federal Regulations. SECTION VIII - SPECIAL PROTECTION INFORMATION SPECIAL RESPIRATORY PROTECTION (Specify type) Use NIOSH approved respirator if product has been heated to produce vapors. VENTILATION LOCAL EXHAUST SPECIAL Normal ventilation adequate N/A MECHANICAL (General) OTHER Normal ventilation adequate NA PROTECTIVE GLOVES **EYE PROTECTION Impervious** Chemical Goggles OTHER PROTECTIVE EQUIPMENT Evewash and safety shower SECTION IX – SPECIAL PRECAUTIONS PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Avoid contact- wear protective clothing and wash thoroughly after using. Avoid inhalation of vapors- use only with adequate ventilation. Do not take internally. Avoid storage in areas of excessive heat or near sources of ignition. OTHER PRECAUTIONS Keep Out of Reach of Children NAME John Petoskey **HMIS SYMBOL** NFPA SYMBOL **SIGNATURE FIRE** HEALTH **HMIS NFPA** FLAMMABILITY 4 EXTREME SEVERE τŢΙΤLΕ REACTIV REACTIVITY SERIOUS 3 HIGH **Technical Support** MODERAT **MODERATE** PREPARATION DATE SLIGHT SLIGHT TOXICITY September 30, 2011 MINIMAL 0 INSIGNIFICANT PHONE NUMBER

SPECIAL

248-941-0347

EZ Poxy (Part A)

PAGE TWO:

BioLogic Chemical Works MATERIAL SAFETY DATA SHEET

MFG.CODE # 121B

SECTION I					
MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.				
BioLogic Chemical Works	248-941-0347				
ADDRESS (Street, City, State and Zip Code)					
P. O. BOX 82501, Rochester MI 48308					
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS				
N/A	EZ Poxy (Part B)				
CHEMICAL FAMILY	FORMULA				
N/A	N/A				

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES		%	TLV (UNITS)
Nonyl Phenol	(CAS# 84852-15-3)	>1	2 mg/1
m-Xylene Diamine	(CAS# 1477-55-0)	>1	700 ppm
Isophorone Diamine	(CAS# 2855-13-2)	>1	not av.

All components of this product are listed on the E.P.A./TSCA inventory of chemical substances.

SOILING POINT °F SPECIFIC GRAVITY (H2O = 1)					
VAPOR PRESSURE (mm. Hg.)	0.1	PERCENT VOLATILE BY VOLUME (%)	1.0		
VAPOR DENSITY (AIR = 1)	heavier	EVAPORATION RATE (=1) n-Butyl Acetate	1		
SOLUBILITY IN WATER	slight	PH	11.5		

SECTION IV – FIRE AND EXPLOSION DATA				
FLASH POINT (Method Used)		FLAMMABLE LIMITS	Lel	Uel
200+°F	Setaflash		N/A	N/A

EXTINGUISHING MEDIA

Water Fog, Alcohol Foam, Dry Chemical, Carbon Dioxide

SPECIAL FIRE FIGHTING PROCEDURES

Fire fighters should wear full protective clothing including self-contained respiratory equipment operated in a positive mode. Use water spray to keep containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Nitrogen Oxides and Nitrogen containing organic material may be released upon combustion may cause lung damage (Pulmonary edema).

(Continued on reverse side)

	SECTION V -	HEALTH HAZ	ARD DATA
THRESHOLD LIMIT VALUE 700 ppm/ H	PRIMARY ROUTES OF I	ENTRY Inhalation	X Skin Contact X Other (Specify)
may cause sensitization. Inha mouth, throat, and stomach. EMERGENCY AND FIRST AID PR Eyes- flush with copious amattention. Skin- remove contactothing before reuse- get me	lation- may be corrosive to COCEDURE ounts of water lifting lids a uninated clothing and flush edical attention. Inhalation-	nd removing conta with water and the	atact may cause blindness. Skin- corrosive to skin, tract, may be toxic if inhaled. Ingestion- corrosive to act lenses to ensure complete irrigation- get medical en wash with soap and water, launder contaminated r and assist breathing as necessary- get medical vater unless victim is drowsy, convulsing, or
unconscious- get medical atte			
MEDICAL CONDITIONS AGGRAV			
Persons with pre-existing eye	· · · · · · · · · · · · · · · · · · ·		
CARCINOGEN: No	NTP	IARC	OTHER
110			
	SECTION \	/I – REACTIVI	TY DATA
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	Excessive heat and open flames
INCOMPATIBILITY (Materials to a	void)		-
Strong Oxidizers	PRODUCTS		
HAZARDOUS DECOMPOSITION	on Nitrogan containing org	ania compounds	
HAZARDOUS DECOMPOSITION Oxides of Carbon and Nitrog		anic compounds	CONDITIONS TO AVOID
HAZARDOUS DECOMPOSITION	MAY OCCUR		CONDITIONS TO AVOID None
HAZARDOUS DECOMPOSITION Oxides of Carbon and Nitrog HAZARDOUS		anic compounds X	CONDITIONS TO AVOID None
HAZARDOUS DECOMPOSITION Oxides of Carbon and Nitrog HAZARDOUS	MAY OCCUR	X	None

	SECTION VIII – SPECIAL	PROTECTION INFORMAT	ION
SPECIAL RESPIRATORY PROT			
Use NIOSH approved respi	irator in areas where TLV has bee	en exceeded.	
VENTILATION	LOCAL EXHAUST		SPECIAL
	To control TLV		N/A
	MECHANICAL (General)		OTHER
	To control TLV		N/A
PROTECTIVE GLOVES		EYE PROTECTION	
Impervious		Chemical Goggles	
OTHER PROTECTIVE EQUIPMI	ENT		
Eyewash and safety shower	r		

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

CORROSIVE MATERIAL- avoid contact- wear protective clothing and wash thoroughly after using. Avoid inhalation of vapors or mists- use only with adequate ventilation. Do not take internally. Avoid storage in areas of excessive heat or near sources

OTHER PRECAUTIONS

of ignition. Keep container closed when not in use. Keep Out of Reach of Children

NAME John Petoskey **HMIS SYMBOL NFPA SYMBOL SIGNATURE FIRE** HEALTH **NFPA HMIS** FLAMMABILITY 4 EXTREME **SEVERE** TITLE REACTIV REACTIVITY **SERIOUS** HIGH **Technical Support** 3 MODERAT **MODERATE** PREPARATION DATE 2 MINIMAL 0 INSIGNIFICANT September 30, 2011 **PHONE NUMBER** 248-941-0347 **SPECIAL** PAGE TWO: EZ Poxy (Part B)

BioLogic Chemical Works MATERIAL SAFETY DATA SHEET

MFG.CODE # 121C

SECTION I				
MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.			
BioLogic Chemical Works	248-941-0347			
ADDRESS (Street, City, State and Zip Code)				
P. O. BOX 82501, Rochester MI 48308				
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS			
N/A	EZ Poxy (Part C)			
CHEMICAL FAMILY	FORMULA			
N/A	N/A			

SECTION II – HAZARDOUS INGREDIENTS			
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES		%	TLV (UNITS)
Silicon Dioxide	(CAS# 7631-86-9)	>1	10 mg/m ³
Titanium Dioxide	(CAS# 13463-67-7)	<1	N/A
Carbon Black	(CAS# 1333-86-4)	<1	N/A

All components of this product are listed on the E.P.A./TSCA inventory of chemical substances.

SECTION III – PHYSICAL DATA					
N/A	SPECIFIC GRAVITY (H2O = 1)	70 lbs/ft			
N/A	PERCENT VOLATILE BY VOLUME (%)	0			
N/A	EVAPORATION RATE (=1)	N/A			
insoluble	PH	N/A			
	•				
	N/A N/A N/A	N/A SPECIFIC GRAVITY (H2O = 1) N/A PERCENT VOLATILE BY VOLUME (%) N/A EVAPORATION RATE (=1)			

SECTION IV – FIRE AND EXPLOSION DATA						
FLASH POINT (Method Used)	FLAMMABLE LIMITS	Lel	Uel			
None		N/A	N/A			
EXTINGUISHING MEDIA Use extinguishing media suitable for fighting surrounding fire						

Use extinguishing media suitable for fighting surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES

Fire fighters should wear full protective clothing including self-contained respiratory equipment operated in a positive mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

(Continued on reverse side)

OFOTION V. HEALTH HAZADD DATA							
SECTION V – HEALTH HAZARD DATA							
THRESHOLD LIMIT VALUE 10 mg/m³ (as dust)	PRIMARY ROUTES OF ENTR	Y Inhalation	X Skin Conta	ct Other (Specify)			
EFFECTS OF OVEREXPOSURE	1			1 d			
Eyes- irritation. Inhalation-prolonged or repeated inhalation of dust may cause irritation to nasal and respiratory tracts. EMERGENCY AND FIRST AID PROCEDURE							
		omovina conto	ot langag to a	ngura complete irrigation, get medical			
				nsure complete irrigation- get medical			
attention. Skin- wash with soap an	d water. Innaiation- remov	e to fresh an	and assist on	eathing as necessary- get medicar			
attention.	DV EVECUEE						
MEDICAL CONDITIONS AGGRAVATED None Known	BY EXPOSURE						
CARCINOGEN:	NTD	IARC		OTHER			
CAROMOCEN.	NTP	2A		OTHER			
	SECTION VI -	REACTIVIT					
STABILITY	UNSTABLE		CONDITIONS	TO AVOID			
	STABLE	X	None				
INCOMPATIBILITY (Materials to avoid)							
Hydrofluoric Acid							
HAZARDOUS DECOMPOSITION PRODU	ICTS						
None HAZARDOUS	MAY OCCUR	<u> </u>	CONDIT	IONS TO AVOID			
POLYMERIZATION	WILL NOT OCCUR	X	None	IONS TO AVOID			
	WILL NOT OCCOR	Λ	Tione				
	SECTION VII - SPILL	ORIFAK	PROCEDI	IRES			
STEPS TO BE TAKEN IN CASE MATERI			INOULD	JILLO			
Sweep up and return to container		,					
WASTE DISPOSAL METHOD	101 10400.						
In accordance with all Local, State	, and Federal Regulations.						
,	,						
SEC.	TION VIII – SPECIAL	PROTECT	ON INFOR	RMATION			
SPECIAL RESPIRATORY PROTECTION	(Specify type)						
Dust mask							
VENTILATION LOCAL EXHAUST SPECIAL							
To control TLV N/A							
	NICAL (General)			OTHER NI/A			
PROTECTIVE GLOVES	ntrol TLV	EYE PROTECT	TON	N/A			
Impervious							
Impervious Chemical Goggles OTHER PROTECTIVE EQUIPMENT							
Eyewash and safety shower							
	SECTION IX - SP	ECIAL PRE	CAUTION	s			
PRECAUTIONS TO BE TAKEN IN HAND	LING AND STORING						
Avoid inhalation of dust. Do not t	ake internally.						
OTHER PRECAUTIONS							
	Keep Out of Re	ach of Children	n				
				NAME			
HMIS SYMBOL	NE	A CYMPOL		John Petoskey			
	NF	PA SYMBOL		SIGNATURE			
HEALTH 1 HMIS	NFPA	FIRE	_	goding to			
FLAMMABILITY 0 SEVERE		0	REACTIV	ATTITLE			
REACTIVITY 0 SERIOUS	•	<u> </u>	O REACTIV	Technical Support			
MODERAT	. 4 CLICUT	\setminus		PREPARATION DATE			
SLIGHT 1 SLIGHT TOXICITY MINIMAL 0 INSIGNIFICANT		>	September 30, 2011				
SPECIAL			ECIAL	PHONE NUMBER 248-941-0347			
		SPI	JAL	PAGE TWO:			
				EZ Poxy (Part C)			